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EXAMINER

SHORTLEDGE, THOMAS E

ART UNIT	PAPER NUMBER
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2654

DATE MAILED: 09/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/833,097	Applicant(s) KENNEDY ET AL.	
	Examiner Thomas E. Shortledge	Art Unit 2654	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-61 and 63-92 is/are pending in the application.
 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-61 and 63-92 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 April 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>08/10/2001</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: Fig. 4, element 182, Fig. 6, element 232, Fig. 10, elements 429, and 422, Fig. 12, elements 498, and 502, Fig. 13, elements 520, 528, and 530, Fig. 14, element 558, Fig. 15, elements 570 and 572, Fig. 17, elements 612 and 614, Fig. 18, element 308, Fig. 19, elements 382, 384, 386 and 388, and Fig. 20, element 406. . Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement-drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 82, 83 and 85-90 are rejected under 35 U.S.C. 102(e) as being anticipated by Peterson et al. (6,343,271)..

As to claim 82, Peterson et al. teach:

receiving identification of at least one provision that applies to a claim (the health care provider is able to download a form to prepare claims, where the form contains the patient's benefits information (col. 8, lines 16-20). The form is then used to properly adjudicate the claims, col. 9, lines 20-23);

receiving identification of the application of the provision to the claim (the patient's benefits information contains the application of the benefits, col. 7, lines 20-30);

storing the received identification of the at least one provision and the received identification of the application of the provision (the provision and the application of the provision are stored on data form for later processing, col. 8, lines 16-20); and

aggregating the received identification of the application of the provision with other identification of the application of the provisions for other claims (the form containing the benefits of the patient is passed to adjudication system to determine if the patient is properly covered for the claim, col. 9, lines 20-23)

As to claim 83, Peterson et al. teach determining at least one provision that applies to the claim (the claim along with the patient's benefits information is sent to the automatic adjudication system for approval or denial, col. 9, lines 30-36, where the benefits of the patients are compared to the claim to see if one applies).

As to claim 85, Peterson et al. teach the claim comprises a claim for healthcare insurance (col. 7, lines 17-20).

As to claim 86, Peterson et al. teach determining the application of the provision to the claim (determining if a benefit covering the patient is able to cover the patients claim, col. 9, lines 30-36).

As to claim 87, Peterson et al. teach determining the amount owed (col. 10, lines 17-20).

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As to claim 88, Peterson et al. teach determining the amount owed comprises determining an amount owed based on a provision limiting coverage (col. 10, lines 17-20).

As to claim 89, Peterson et al. teach determining the amount owed comprises determining an amount owed based on a provision identifying a deductible (col. 10, lines 17-20).

As to claim 90, Peterson et al. teach determining a benefit value (col. 10, lines 17-20).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-61, 68-81, 84 and 91-92 are rejected under 35 U.S.C. 103(a) as being unpatentable over Peterson et al. in view of Trower II et al. (6,922,810).

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As to claim 1, Peterson et al. teach;

receiving information corresponding to at least one provision governing claim adjudication (the health care provider is able to download a form to prepare claims, where the form contains the patient's benefits information (col. 8, lines 16-20). The form is then used to properly adjudicate the claims, col. 9, lines 20-23);

receiving information corresponding to a claim (creating a claim and then transferring the claim to the adjudication system, col. 9, lines 17-23);

based on the received information corresponding to at least one provision and the received information corresponding to the claim, determining whether the at least one provision applies to the claim (the information pertaining to the claims are inputted and based on that information are auto adjudicated by a set of rules based on criteria set by the insurer (col. 9, lines 25-36), where it would be obvious to one of ordinary skill in the art at the time of the invention that the adjudication rules would contain rules related to comparing the claim to the patients benefits information since these rules are created by the insurer, and those claims that are covered by the benefits are to be approved).

Peterson et al. does not explicitly teach a context free grammar expression.

However, Trower, II et al. teach using a context free grammar to create an expression for input to a database information retrieval system, (col. 5, lines 35-44).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the methods of Peterson et al. with the context free

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grammar expressions of Trower II et al. to create a system that has an input that allows for straightforward computer access, as taught by Trower II et al. (col. 5, lines 38-44).

As to claim 27, Peterson et al. teach:

receiving information corresponding to different provisions governing adjudication of the claim (the health care provider is able to download a form to prepare claims, where the form contains the patient's benefits information, where the benefit information can be in different forms (col. 8, lines 16-20). The form is then used to properly adjudicate the claims, col. 9, lines 20-23);

receiving information corresponding to a claim (creating a claim and then transferring the claim to the adjudication system, col. 9, lines 17-23);

based on the received information corresponding the different provisions and the received information corresponding to the claim, determining whether the at least one provision applies to the claim (the information pertaining to the claims are inputted and based on that information are auto adjudicated by a set of rules based on criteria set by the insurer (col. 9, lines 25-36), where it would be obvious to one of ordinary skill in the art at the time of the invention that the adjudication rules would contain rules related to comparing the claim to the patients benefits information since these rules are created by the insurer, and those claims that are covered by the benefits are to be approved).

Peterson et al. does not explicitly teach a context free grammar expression.

However, Trower, II et al. teach using a context free grammar to create an expression for input to a database information retrieval system, (col. 5, lines 35-44).

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Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the methods of Peterson et al. with the context free grammar expressions of Trower II et al. to create a system that has an input that allows for straightforward computer access, as taught by Trower II et al. (col. 5, lines 38-44).

As to claim 74, Peterson et al. teach:

receiving information corresponding to healthcare insurance provisions adjudication (the health care provider is able to download a form to prepare claims, where the form contains the patient's benefits information (col. 8, lines 16-20). The form is then used to properly adjudicate the claims, col. 9, lines 20-23);

Peterson et al. does not teach:

the information being encoded in a context free grammar; nor parsing the receiving information.

However, Trower II et al. teach encoding information in a context free grammar and parsing the information (col. 5, lines 35-40, and col. 7, lines 16-22).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the methods of Peterson et al. with the context free grammar expressions of Trower II et al. to create a system that has an input that allows for straightforward computer access, as taught by Trower II et al. (col. 5, lines 38-44).

As to claim 91, Peterson et al. teach:

rules for expressing health care information, and encoding health care information (col. 7, lines 20-32, col. 8, lines 17-22, and col. 9, lines 10-15).

Peterson et al. does not explicitly teach a context free grammar.

However, Trower, II et al. teach using a context free grammar to create an expression for input to a database information retrieval system, (col. 5, lines 35-44).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the methods of Peterson et al. with the context free grammar expressions of Trower II et al. to create a system that has an input that allows for straightforward computer access, as taught by Trower II et al. (col. 5, lines 38-44).

As to claims 2, 28 and 75, Peterson et al. do not teach the context free grammar comprises a Backus-Naur format grammar.

However, Trower II et al. teach a Backus-Naur format grammar (col. 8, lines 18-50).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the methods of Peterson et al. with the context free grammar expressions of Trower II et al. to create a system that has an input that allows for straightforward computer access, as taught by Trower II et al. (col. 5, lines 38-44).

As to claim 3, Peterson et al. teach:

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wherein at least one provision includes expression of application criteria for the provision (the patient's benefits information is inputted into a claim, col. 8, lines 19-23); and

wherein determining whether the at least one provision applies to the claim includes evaluating the expression using the received information corresponding to the claim (the claim along with the patient's benefits information is sent to the automatic adjudication system for approval or denial, col. 9, lines 30-36).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the methods of Peterson et al. with the context free grammar expressions of Trower II et al. to create a system that has an input that allows for straightforward computer access, as taught by Trower II et al. (col. 5, lines 38-44).

As to claims 4 and 29, Peterson et al. teach automatically adjudicating the claim based on the at least one provision that applies to that claim (the claim along with the patient's benefits information is sent to the automatic adjudication system for approval or denial, col. 9, lines 30-36).

As to claim 5, Peterson et al. teach adjudicating comprises at least one of the following: determining an obligation owed to another party and determining an amount owed from another party (adjudicating the claims and determining to either approve or deny the claim, col. 9, lines 34-35).

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As to claim 6, Peterson et al. teach logging identification of the provision determined to apply to the claim along with information corresponding to the adjudication (applying adjudication rules to the personal benefits to determine if the claim should be approved or denied, col. 9, lines 30-35).

As to claim 7, Peterson et al. teach generating a report by analyzing different adjudications of the provision (providing the results of the adjudication to a means to initiate payment, where payment is made if the claim has been approved by the adjudication system col. 9, lines 62-65. Where it would be obvious to one of ordinary skill in the art at the time of the invention that a report would be made based on whether the claim is approved or denied, and that report is forwarded to the payment facility).

As to claim 8, Peterson et al. do not teach the received information corresponding to the context free grammar expression of the at least one provision comprises information determined by parsing the context free grammar expression.

However, Trower II et al. teach parsing a context free grammar expression to find the information to provide as input to the system, (col. 5, lines 35-44).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the methods of Peterson et al. with the context free grammar expressions of Trower II et al. to create a system that has an input that allows for straightforward computer access, as taught by Trower II et al. (col. 5, lines 38-44).

As to claim 9, Peterson et al. does not teach the context free grammar expression of the at least one provision includes information corresponding to a tree generated by parsing the context free grammar expression.

However, Trower II et al. teach parsing an inputted context free grammar expression (col. 7, lines 16-18). Where it would be necessary to use a parse tree, since parse trees are commonly used when single words or characters must be parsed from a sentence and used for input to a system).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the methods of Peterson et al. with the context free grammar expressions of Trower II et al. to create a system that has an input that allows for straightforward computer access, as taught by Trower II et al. (col. 5, lines 38-44).

As to claim 10, Peterson et al. does no teach parsing the context free grammar expression.

However, Trower II et al. teach parsing the context free grammar expression (col. 7, lines 17-20).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the methods of Peterson et al. with the context free grammar expressions of Trower II et al. to create a system that has an input that allows for straightforward computer access, as taught by Trower II et al. (col. 5, lines 38-44).

As to claim 11, Peterson et al. does not teach generating a tree from the parsing of the context free grammar expression.

However, Trower II et al. teach parsing an inputted context free grammar expression (col. 7, lines 16-18). Where it would be necessary to use a parse tree, since parse trees are commonly used when single words or characters must be parsed from a sentence and used for input to a system).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the methods of Peterson et al. with the context free grammar expressions of Trower II et al. to create a system that has an input that allows for straightforward computer access, as taught by Trower II et al. (col. 5, lines 38-44).

As to claims 12, 71 and 77, Peterson et al. teach:

providing a graphical user interface for receiving user input identifying provision elements (graphical user interface with menus for receiving user input related to the patients benefits information, col. 8, lines 29-34); and

generating an expression of the provision (generating an input based on the benefits (col. 8, lines 50-55).

Peterson et al. do not teach the context free grammar based on the received user input.

However, Trower II et al. teach generating an input based on a users input and a context free grammar expression (col. 5, lines 35-40).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the methods of Peterson et al. with the context free grammar expressions of Trower II et al. to create a system that has an input that allows for straightforward computer access, as taught by Trower II et al. (col. 5, lines 38-44).

As to claim 13, Peterson et al. teach receiving information corresponding to at least one provision comprises receiving information corresponding to more than one provision (receiving information corresponding to information related to the patients benefits information, col. 8, lines 20-22).

As to claim 14, Peterson et al. teach determining whether the at least one provision applies to the claim comprises determining more than one provision applies (determining what benefits apply to the claim (col. 9, lines 17-23), where it would be necessary to determine if more than one benefit will cover the claim).

As to claim 15, Peterson et al. teach the more than one provisions comprise one or more provisions included in an agreement (the benefits include contractual and insurance obligations between the patient, the insurers, and the participating health care providers, col. 7, lines 23-27).

As to claim 16, Peterson et al. teach the more than one provisions comprise provisions included in different agreements (the benefits include contractual and

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insurance obligations between the patient, the insurers, and the participating health care providers, col. 7, lines 23-27).

As to claims 17 and 32, Peterson et al. teach at least one provision comprises a provision included in a healthcare plan (the benefits include contractual and insurance obligations between the patient, the insurers, and the participating health care providers, col. 7, lines 23-27).

As to claims 18 and 37, Peterson et al. teach at least one provision comprises a provision included in a provider contract (the benefits include contractual and insurance obligations between the patient, the insurers, and the participating health care providers, col. 7, lines 23-27).

As to claims 19, 33-36 and 39, Peterson et al. teach at least one provision comprises a provision corresponding to a policy regarding claim coverage, and excluding coverage, limiting coverage, governing coverage deductibles, expressing calculation of benefits (the benefits include contractual and insurance obligations between the patient, the insurers, and the participating health care providers, col. 7, lines 23-27).

As to claim 20, Peterson et al. teach at least one provision comprises a provision corresponding to a regulation (the benefits include contractual and insurance obligations

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between the patient, the insurers, and the participating health care providers, col. 7, lines 23-27).

As to claims 21 and 78, Peterson et al. teach receiving information corresponding to a claim comprises receiving information over a network (accessing via the Internet (col. 8, line 35).

As to claim 22, Peterson et al. teach the claim comprises a claim having at least one code corresponding to a healthcare service, procedure, or tangible article (encoding the diagnosis and treatment onto the claim form as the claim is prepared for submission, col. 9, lines 10-13).

As to claim 23, Peterson et al. teach the code comprises an AMA (America medical Association) code (encoding the diagnosis and treatment onto the claim form as the claim is prepared for submission, col. 9, lines 10-13, where it would be necessary that the codes could be one of the AMA codes).

As to claim 24, Peterson et al. teach extracting the information corresponding to the claim from information included on a health insurance claim form (using health insurance claim forms, col. 8, lines 18-20).

As to claim 25, Peterson et al. teach the health insurance claim form comprise a HCFA form (using health insurance claim forms, col. 8, lines 18-20, where it would be necessary the form is a HCFA form).

As to claim 26, Peterson et al. teach the extracting comprises extracting from an electronic data structure storing from data (downloading a form, and then using that form for adjudication, col. 8, lines 18-20, where it would be necessary for the form to contain electronic data since it is on a computer).

As to claim 30, Peterson et al. teach adjudicating the claim includes accessing a history of the previously adjudicated claims (the benefits system, which is used, by the adjudication system includes information pertaining to the totals of health care expenses paid by the patient, which is important when payment caps are used within a benefit, col. 7, lines 30-35, where it would be necessary for the previous payments to have gone through an adjudication process).

As to claim 31, Peterson et al. teach accessing a history of previously adjudicated claims for a single healthcare plan member (the benefits system, which is used, by the adjudication system includes information pertaining to the totals of health care expenses paid by the patient, which is important when payment caps are used within a benefit, col. 7, lines 30-35, where it would be necessary for the previous payments to have gone through an adjudication process).

As to claim 38, Peterson et al. teach the provisions comprise provisions in a benefit schedule (the benefits include contractual and insurance obligations between the patient, the insurers, and the participating health care providers, col. 7, lines 23-27).

As to claim 40, Peterson et al. teach the provision comprise different benefit schedules (the benefits include contractual and insurance obligations between the patient, the insurers, and the participating health care providers including benefit schedules, col. 7, lines 23-27).

As to claim 41, Peterson et al. teach the different benefit schedules comprise at least one of the following: a default benefit schedule, an in-network benefit schedule, and an out-of-network benefit schedule (an in-network benefit schedule and an out-of-network benefit schedule, col. 7, lines 25-35).

As to claim 42, Peterson et al. teach determining, which, if any of the different benefit schedules applies to the claim (auto adjudicating the claim, where the amount is determined to be paid out, and where this amount is based on the benefits of the patient, where different schedules would pay different amounts, col. 9, lines 46-55, and 62-67).

As to claim 43, Peterson et al. teach determining the benefits owed to the healthcare plan member (auto adjudicating the claim, where the amount is determined

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to be paid out, and where this amount is based on the benefits of the patient, where different schedules would pay different amounts, col. 9, lines 46-55, and 62-67).

As to claim 44, Peterson et al. teach generating an explanation of benefits for the determined benefits (explaining the benefits, col. 10, lines 25-30).

As to claim 45 and 46, Peterson et al. teach the provisions comprise provisions included in a provider contract describing reimbursement owed to a provider or to the provider for the claim (the benefits database contains the information pertaining to the contractual and insurance obligations between the patient, the insurers and the participating health care providers, including information such as expenses to be paid, col. 7, lines 24-34, where it would be necessary to determine if money is owed to the provider).

As to claim 47, Peterson et al. teach generating an explanation of reimbursement for the determined reimbursement (printing a invoice showing what money is owed, and who the money is owed to, col. 10, lines 17-23).

As to claim 48, Peterson et al. teach the provisions comprise provisions corresponding to a healthcare company policy (the benefits include healthcare company policy, col. 7, lines 20-26).

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As to claim 49, Peterson et al. teach the provisions comprise provisions corresponding to regulations (the benefits database can contain regulations such as persons to be contacted in case of emergency and medical history, col. 7, lines 39-41, where it would be necessary that within the medical history files pertaining to do not resuscitate and organ donor would be included).

As to claim 50, Peterson et al. teach more than one of the provisions applies to a claim (determining what provisions apply to the claims, col. 9, lines 18-23, where it would be necessary that more than one provision could apply to claim, since claims can fall under numerous treatments).

As to claim 51, Peterson et al. teach determining whether to review a claim by hand (col. 9, lines 35-37).

As to claim 52, Peterson et al. teach determining based on an estimation that a particular member can be correctly identified based on information corresponding to the claim (within the claim information is held to determine who the claim belongs to, col. 10, lines 17-20).

As to claim 53, Peterson et al. teach the estimation comprises an estimation based on a weighting of different member information included in the claim (matching the insured to a social security number to find the identity of the insured, col. 16, lines

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21-24, where it would be obvious to one of ordinary skill in the art at the time of the invention to weight the different members, and find the one that has the highest weight, selecting that one to be the insured, to improve the accuracy in which the patient is selected).

As to claim 54, Peterson et al. teach determining based on estimation that a provider can be correctly identified (selecting the provider to pay the appropriate amount, col. 9, line 65 through col. 10, line 3).

As to claim 55, Peterson et al. teach the estimation comprises an estimation based on a weighting of different provider information included in the claim (selecting the provider to pay the appropriate amount, col. 9, line 65 through col. 10, line 3, where it would be obvious to one of ordinary skill in the art to use a weighting function based on the claim information to increase the accuracy in which a correct provider can be found).

As to claim 56, Peterson et al. do not teach receiving text of the context free grammar expression of the provisions.

However, Trower, II et al. teach using a context free grammar to create an expression for input to a database information retrieval system, (col. 5, lines 35-44).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the methods of Peterson et al. with the context free

grammar expressions of Trower II et al. to create a system that has an input that allows for straightforward computer access, as taught by Trower II et al. (col. 5, lines 38-44).

As to claim 57, Peterson et al. do not teach parsing the received text of the context free grammar expression of the provisions.

However, Trower II et al. teach parsing a context free grammar expression to find the information to provide as input to the system, (col. 5, lines 35-44).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the methods of Peterson et al. with the context free grammar expressions of Trower II et al. to create a system that has an input that allows for straightforward computer access, as taught by Trower II et al. (col. 5, lines 38-44).

As to claim 58, Peterson et al. do not teach generating information corresponding to a tree from the parsing.

However, Trower II et al. teach parsing an inputted context free grammar expression (col. 7, lines 16-18). Where it would be necessary to use a parse tree, since parse trees are commonly used when single words or characters must be parsed from a sentence and used for input to a system).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the methods of Peterson et al. with the context free grammar expressions of Trower II et al. to create a system that has an input that allows for straightforward computer access, as taught by Trower II et al. (col. 5, lines 38-44).

As to claim 59, Peterson et al. do teach receiving information comprises receiving information produced by parsing the context free grammar expression of the provisions.

However, Trower II et al. teach parsing an inputted context free grammar expression to find the input information (col. 7, lines 16-18).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the methods of Peterson et al. with the context free grammar expressions of Trower II et al. to create a system that has an input that allows for straightforward computer access, as taught by Trower II et al. (col. 5, lines 38-44).

As to claim 60, Peterson et al. do not teach receiving information comprises receiving information corresponding to a tree generated by parsing the context free grammar expression of the provisions.

However, Trower II et al. teach parsing an inputted context free grammar expression (col. 7, lines 16-18). Where it would be necessary to use a parse tree, since parse trees are commonly used when single words or characters must be parsed from a sentence and used for input to a system.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the methods of Peterson et al. with the context free grammar expressions of Trower II et al. to create a system that has an input that allows for straightforward computer access, as taught by Trower II et al. (col. 5, lines 38-44).

As to claim 61, Peterson et al. do not teach storing information corresponding to a tree based on a parsing of the context free grammar, each provision represented by one or more tree nodes; nor

wherein determining whether a provision applies comprises traversing the tree to identify tree nodes corresponding to the claim.

However, Trower II et al. teach parsing an inputted context free grammar expression (col. 7, lines 16-18). Where it would be necessary to use a parse tree to select the input information from the input and then apply that information in a format that is easy for a computer to read, to the system. Trower II et al. also teaches finding matching from the parsed information, (col. 5, lines 35-44).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the methods of Peterson et al. with the context free grammar expressions of Trower II et al. to create a system that has an input that allows for straightforward computer access, as taught by Trower II et al. (col. 5, lines 38-44).

As to claim 68, Peterson et al. teach information corresponding to the claim comprises one or more healthcare codes (encoding the diagnosis and treatment onto the claim form as the claim is prepared for submission, col. 9, lines 10-13).

As to claim 69, Peterson et al. teach bundling a first set of more than one healthcare code into a second set having fewer healthcare codes than the first set (the

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set of codes used within the claim document, creating a smaller set of codes used within the document, col. 9, lines 10-13).

As to claim 70, Peterson et al. teach replacing a healthcare code with a different healthcare code (encoding healthcare information within a document, where healthcare information can be replaced with different healthcare information, col. 9, lines 10-15).

As to claims 72 and 80, Peterson et al. teach determining if the provisions conflict at design time (the insurer is able to set the rules of adjudication, (col. 9, lines 31-33), where it would be obvious to one of ordinary skill in the art at the time of the invention that if conflicts were found in the database the insurers would be able to correct them).

As to claim 73, Peterson et al. teach determining if the provisions conflict comprises determining if the provision reference the same healthcare code time (the insurer is able to set the rules of adjudication, (col. 9, lines 31-33), where it would be obvious to one of ordinary skill in the art at the time of the invention that if conflicts were found in the database, where provisions called the same healthcare code the insurers would be able to correct them).

As to claim 78, Peterson et al. teach the user interface encoded in a structure generalized markup language (accessing via the internet col. 8, line 35, where the internet would include markup languages).

As to claim 84 (in view of claim 81 above), Peterson et al. do not teach provisions encoded in a context free grammar.

However, Trower, II et al. teach using a context free grammar to create an expression for input to a database information retrieval system, (col. 5, lines 35-44).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the methods of Peterson et al. with the context free grammar expressions of Trower II et al. to create a system that has an input that allows for straightforward computer access, as taught by Trower II et al. (col. 5, lines 38-44).

As to claim 91, Peterson et al. teach the health care information comprises a coverage provision (col. 7, lines 20-32).

6. Claim 63-67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Peterson et al. in view of Trower II et al. as applied to claim 61 above, and further in view of Wakayama et al. (5,491,628).

As to claim 63, Peterson et al. and Trower II et al. do not teach:
wherein at least some tree nodes include terminal values of the context free grammar;

wherein the information corresponding to the claim comprises information including a terminal value of the context free grammar; and

wherein traversing the tree to identify tree nodes corresponding to the claim correspond identifying a terminal value included in the tree and included in the information corresponding to the claim.

However, Wakayama et al. teach creating a parse tree from a context free grammar, where there are terminal values; information is represented by terminal values within the parse tree and traversing the tree to identify tree nodes corresponding to the needed information (fig. 1, and lines 53-67).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Peterson et al. with the methods of Trower II et al. with the parse tree creation of Wakayama et al. to increase the ability for a system to compute the transformation from the first document to the second document as an attribute evaluation, as taught by Trower II et al., (col. 2, lines 19-22).

As to claim 64, Peterson et al. and Trower II et al. do not teach:

traversing the tree comprises determining a sub-tree to traverse and indexing the sub-tree.

However, Wakayama et al. teach traversing sub-trees with a tree, (fig. 1).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Peterson et al. with the methods of Trower II et al. with the parse tree creation of Wakayama et al. to increase the ability for a system to compute the transformation from the first document to the second document as an attribute evaluation, as taught by Trower II et al., (col. 2, lines 19-22).

As to claim 65, Peterson et al. teach exclusions, limits, deductibles and benefits (col. 7, lines 20-30).

Peterson et al. and Trower II et al. do not teach using sub-trees.

However, Wakayama et al. teach sub-trees with a tree, (fig. 1).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Peterson et al. with the methods of Trower II et al. with the parse tree creation of Wakayama et al. to increase the ability for a system to compute the transformation from the first document to the second document as an attribute evaluation, as taught by Trower II et al., (col. 2, lines 19-22).

As to claim 66, Peterson et al. and Trower II et al. do not teach a provision in the exclusions sub-tree applies to the claim, not traversing the limits sub-tree, the deductibles sub-tree, or the benefits sub-tree for the claim.

However, Wakayama et al. teach traversing paths of sub-trees within a tree to find the correct path, (fig. 1).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Peterson et al. with the methods of Trower II et al. with the parse tree creation of Wakayama et al. to increase the ability for a system to compute the transformation from the first document to the second document as an attribute evaluation, as taught by Trower II et al., (col. 2, lines 19-22).

As to claim 67, Peterson et al. teaches determining the benefit schedule that applies to the claim (adjudicating the claims based on the benefits that fit the claims, col. 9, lines 18-25).

Peterson et al. and Trower II et al. do not teach determining the sub-tree to traverse.

However, Wakayama et al. teach traversing paths of sub-trees within a tree to find the correct path, (fig. 1).

Therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of Peterson et al. with the methods of Trower II et al. with the parse tree creation of Wakayama et al. to increase the ability for a system to compute the transformation from the first document to the second document as an attribute evaluation, as taught by Trower II et al., (col. 2, lines 19-22).

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See PTO-892.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas E. Shortledge whose telephone number is (571)272-7612. The examiner can normally be reached on M-F 8:00 - 4:30.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on (571)272-7602. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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TS
9/15/05



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